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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,428	12/20/2004	Katrin Gisselhalt	1511-1036	6764
<small>465 7590 05/07/2009</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER GILLESPIE, BENJAMIN	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 05/07/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/518,428

**Applicant(s)**

GISSELFALT, KATRIN

**Examiner**

BENJAMIN J. GILLESPIE

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/20/2009 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flodin ('441).
3. This rejection has been previously set forth in paragraphs 2 and 3 of the office action mailed 11/21/2008 and is incorporated herein by reference.

***Response to Arguments***

4. Applicant's arguments filed 2/20/2009 with respect to the rejection of claims 1-20 have been considered but are not persuasive.
5. As previously discussed in the advisory action mailed 3/9/2009 – applicants' reliance on the theoretical analysis of Flodin according to Flory is not persuasive because it has not been presented in a declaration, and therefore appears to be an unsubstantiated opinion.

6. However, if applicants submit a declaration explaining the merits of Flory, it should be noted that Flory is still not persuasive in overcoming the teachings of Flodin since Flory is drawn to condensation reactions of low molecular weight diols and dicarboxylic acids, not the diisocyanate and polyester diol of Flodin. Additionally, Flory provides no discussion regarding the effects of temperature and catalyst, which are relevant issues in the instant prima facie case of obviousness. Still, if applicants maintain the theoretical analysis is relevant, Flory holds no weight in overcoming the instant prima facie case of obviousness.

7. The current rejection explains how example 4 of Flodin satisfies all of the claimed limitations except a reaction temperature of 60C. With this understanding, it was then discussed how it would be obvious to modify the reaction temperature of example 4 from 70-80C to 60C based on column 4 lines 35-45 of Flodin. Applicants have not set forth any data or experimental showings that a reaction temperature of 60C is unobvious for example 4.

8. Instead applicants' theoretical comparatives are presented with the assumption that "all diisocyanate and all diol are mixed at once". This raises another deficiency in applicants' theoretical analysis of Flodin - it fails to provide a comparison with the closest prior art, i.e. the "dropwise" addition of polyesterdiol in example 4.

9. Moreover, one of ordinary skill would reasonably expect dropwise addition of polyesterdiol in an excess of diisocyanate results in perfect-prepolymers. Dropwise introduction of polyesterdiol results in a relative "overload" of monomeric diisocyanate when compared to the newly introduced polyesterdiol - this increases the likelihood of diol + monomeric diisocyanate reaction.

10. Applicants also argue "it would have been further unobvious that a process of slow addition, drop by drop of diol to a bulk of diisocyanate at a temperature at or below 60C would give desired material properties with respect to toughness, elongation, and degradation".

However, this position is not persuasive since it has not been supported by any type of experimental data, and instead is based on an unsubstantiated opinion which can not be substituted for fact. In re Pike et al., 84 USPQ; In re Renstrom, 81 USPQ 390.

11. Finally, because applicants in their discussion of Flory assumed "mixed at once" vs. the relied upon "dropwise" method, and Flory fails to discuss the reaction of diisocyanate + polyesterdiol, as well as reaction temperature, and catalyst - any theoretical analysis based on the teachings of Flory will be insufficient to overcome the current prima facie case of obviousness. Each of these factors need to be addressed before one can clearly establish the current case of prima facie obviousness has been overcome (emphasis added).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin J Gillespie/

Examiner, Art Unit 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796